

2005 WILDLAND FIRE MANAGEMENT STANDARD OPERATIONS PLAN, PERSONNEL and EQUIPMENT MOBILIZATION GUIDE

City of

Boulder, Colorado

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 DIVISION CHIEF
 WILDLAND FIRE**

INTRODUCTION

The City of Boulder owns and manages approximately 50,000 acres within its public lands and watershed properties. Over two thirds of the property is located in boundary areas or in the urban interface. The urban interface is the area where homes meet the wildlands, as in Western Boulder, or where homes are intermixed with the wildlands, as in Eastern Boulder.

All these areas are covered with vegetation that will sustain wildfire and under certain weather conditions promote destructive wildfires. The Boulder area has experienced many wildfires in the past. Studies have revealed that historically large wildfires impacted the Front Range on an average of every 2-20 years. The vegetation that occupies the foothills, Ponderosa Pine and native grasses, are fire-adapted species which thrive in fire environments.

Boulder's weather has a very strong influence on fire behavior. Boulder is located in a rain shadow due to the topography to the west. In addition the Front Range experiences strong and erratic winds, due to thunderstorm activity in the spring and summer and Chinook winds in the fall and winter. Boulder also has local wind phenomena that occur due to extreme topographic features to the west. High temperatures, low humidities, little or no moisture for prolonged periods, combined with combustible vegetation make the Front Range environment susceptible to large wildfires.

The other element is the continued utilization of our Open Space and Mountain Parks by increasing numbers of visitors. Our "Greenbelt", undeveloped areas outlining the city limits, has an extensive trail system of over 200 miles where a wide diversity of wildlife reside. Annually, over 3.5 million people visit Open Space and Mountain Parks.

Urban sprawl and development in the wildlands has contributed to the ever increasing wildfire problem. It is our goal to work with local fire departments, citizens, local, state and federal agencies to mitigate and manage the wildfire danger in the Front Range region.

A. PURPOSE

The purpose of this plan is to establish the annual wildland fire season operation and mobilization procedures. The goal is to provide guidelines for safe and efficient wildland fire suppression and prescribed fire management operations.

B. PREVENTION

The City of Boulder Wildfire Prevention Program helps inform citizens of the hazards of wildfire and how to mitigate its affects through fire safe planning and educational activities. The City of Boulder Fire Department in conjunction with Open Space/Mountain Parks and the Parks and Recreation Departments maintains the wildfire prevention program.

In 1993, the City of Boulder Fire Department, Open Space and Parks and Recreation Departments decided to expand the prevention and education program. The City of Boulder Wildland Fire Hazard Identification and Mitigation System was initiated (Fir-Mit). The data evaluates homes in the urban interface and provides practical information on wildfire mitigation to homeowners. The data is analyzed and mapped utilizing geographic information systems to provide comprehensive information on wildfire hazards. In 2004 the Fire department received grant money from the Federal government to re-enter and update this survey. Anchorpoint group was contracted to resurvey the project area by using current Red Zone technology. This information resides with the Fire department but can be accessed easily for public information.

The City of Boulder supports and practices the following wildfire mitigation and education programs:

Prescribed fire is utilized as a fire prevention and resource management tool to reduce hazardous fuel accumulations and achieve land management objectives. Wildfire fuels mitigation is conducted through OSMP thinning prescriptions found in the City of Boulder Forest Ecosystem Plan.

Provide public service announcements on wildfire prevention and fire danger.

Initiate fire bans during critical fire danger indices or high use visitation events such as July 4th.

Collect and disseminate fire weather data from the City's weather station. During fire season call 441-3938 for daily fire danger.

Present educational programs at Boulder County Public Schools and Fair, day care facilities, local shopping centers and the Boulder County Fair.

Produce wildland fire education and safety materials such as videos, books and pamphlets.

Present wildfire awareness presentations to homeowners associations, local, state, and federal agencies.

Present wildfire simulations and seminars to promote interagency cooperation and citizen support.

Maintain fire danger rating signs on Open Space and Mountain Parks properties to inform citizens of the current fire danger.

Propose fire safety ordinances concerning defensible space landscaping, non-combustible construction practices and pre-plans for neighborhood designs and evacuation.

Participate in the Boulder County Fair, Parades, Fall Festival, Fire Prevention Week, and other activities which will most effectively convey the message to the public.

C. TRAINING

To qualify for the city of Boulder Wildland Fire Crew , **HOTIRONs**, you must annually satisfy the national educational and physical standards adopted by the NWCG. All City of Boulder **RED CARDED** and trained personnel constitute the **HOTIRONs**.

The minimum requirements are successful completion of:

- S-130 WILDLAND FIRE TRAINING
- S-190 INTRODUCTION TO WILDLAND FIRE BEHAVIOR
- I-100 INTRODUCTION TO INCIDENT COMMAND
- PMS-415 STANDARDS FOR SURVIVAL
- SUCCESSFUL TIME IN 1.5 MILE RUN or the Pack Test for Arduous Work.

Experience will be highly considered in determining fire assignments and may substitute actual course work.

Completing a course does not mean a firefighter is qualified to advance to a higher level. You must demonstrate a level of competency and be evaluated in the field before you can advance. Furthermore, a recommendation from your supervisor is also required and a completed Task Book for positions above firefighter is required.

Courses will be offered locally or regionally on an annual basis that will satisfy training schedules for introductory firefighters and fire management positions. The Boulder County Wildland Fire Cooperators annually sponsor classes which will achieve the requirements.

D. WILDLAND FIRE SUPPRESSION OBJECTIVES

Every wildland fire is either a wildfire or a prescribed fire. An aggressive and safe initial attack action shall be utilized on all wildfires.

Wildfires on or threatening city of Boulder properties may initiate the response of all trained personnel.

Wildfire suppression and/or prescribed fire operations may take priority over all other work. Emphasis will be placed on safety, efficiency, appropriate staffing and equipment utilization.

The objective of initial attack shall be to contain 90% of all fires at less than one half acre.

A least cost, least damaging type of suppression action shall be implemented on fires that escape initial attack.

E. CALL OUT PROCEDURES

Boulder Communications will tone, (page) Fire, Open Space/Mountain Parks personnel on all fires occurring on City owned lands. A ranger will always be on stand-by and will respond appropriately to any Open Space/Mountain Parks incident. The Boulder Fire Department may also respond initially. The first arriving resource will inform Communications of his/her ETA. to the incident and have Communications tone or contact the Division Chief of Wildland Fire or on-call designee. Upon arrival, the Initial Attack Incident Commander will size-up the incident, inform Communications of the situation, order any additional response or equipment if needed and advise other staff members.

The first responding City representative shall coordinate initial attack operations with the local fire protection district officer. Frequently, local fire protection districts will arrive first on scene. Therefore, it is imperative that City of Boulder staff responding to the incident inquire about land ownership, fire size-up, responding or ordered resources.

Additional City crew members will be contacted by radio or phone to respond to the pre-designated staging areas throughout the City. See attached phone list.

F. COMMAND/RESPONSE

Initial attack fire protection on Mountain Parks, Open Space and Watershed properties is provided contractually by local Fire Protection Districts and the City. City resources that respond include trained firefighters from the City of Boulder Fire Department and personnel from the Open Space/Mountain Parks and Parks and Recreation Departments.

Suppression and management of wildfires on City of Boulder properties is the responsibility of the City and/or land management department. Trained personnel are expected to respond and participate in initial attack, suppression and resource rehabilitation operations.

On any confirmed smoke report or fire on City of Boulder properties trained personnel will respond appropriately with all personal protective equipment. Notification may be through various channels such as; pager, communications, phone call or radio. During normal working hours, information on fire status, ordered personnel and equipment may be acquired through monitoring radio traffic, contacting the first arriving resource or contacting Boulder Regional Communications (3374). After normal working hours, notification of personnel orders may be by phone. The Division Chief of Wildland Fire or designee will phone support personnel (designated in the phone section) to contact trained firefighters for mobilization. Information

including fire status, response time, fire gear, equipment, check-in location or staging areas will be included.

All radio operations will occur on **RED 3** between Fire, Open Space/Mountain Parks and Parks and Recreation personnel. All emergency operations will be conducted on the designated emergency channel by the incident commander. Monitoring Red 1 is essential. All personnel will utilize their call numbers when arriving as a single resource. All personnel responding in an engine will utilize the designated engine number located on the side of the vehicle.

At any time the Incident Commander can request the assistance of the City of Boulder Fire Department. The I.C. can request the fire department by contacting Boulder Regional Communications on Red 1.

Wildfires occurring on City property in a specific fire district will be managed in a unified command structure.

In a MODE 1 or Mode 2 wildfire, the first arriving city representative or local fire department officer will assume the Initial Attack Incident Commander responsibilities. Upon arrival, personnel from the Wildland Fire Management Division of the Fire Department may assume command. (Because of the many jurisdictions involved in Boulder County, land ownership needs to be determined and the appropriate fire department needs to be contacted if not already in-route). After containment, the fire will be turned over to the City for control and mop-up operations. (Please see the Size-up and Strategy and Tactics sections)

In a MODE 3 or 4 wildfire, the Division Chief of Wildland Fire or designee and the representative of the impacted land management department or representative, will assist in coordinating suppression activities with the Boulder County Sheriff's Department, State or National Overhead Team.

G. SAFETY

The suppression of wildfires is a very dangerous task. All tactical decisions will be based on safety first. Safety will never be compromised to reach a specific goal whether in a travel status to a fire, performing handline duties, during engine operations, mop-up or demob status.

The four common denominators of fatal or near-miss situations are as follows:

- **MOST OF THE INCIDENTS OCCURRED ON RELATIVELY SMALL FIRES OR ISOLATED SECTORS OF LARGE FIRES.**
- **MOST OF THE FIRES WERE INNOCENT IN APPEARANCE PRIOR TO THE "FLARE-UP" OR "BLOW-UP."**
- **FLARE-UPS OCCURRED IN DECEPTIVELY LIGHT FUELS.**
- **FIRES RAN UPHILL IN CHIMNEYS, GULLIES, OR ON STEEP SLOPES.**

The **FIRE ORDERS** and the **SITUATIONS THAT SHOUT "WATCH-OUT"** were developed to remind firefighters of the hazards on the fireline and to provide cues for constantly collecting information concerning safety. When near misses or fatalities occur one or more of the following were violated.

FIRE ORDERS:

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communication with your forces, your supervisor and adjoining forces.
8. Give clear instructions and insure they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

WATCH-OUT! SITUATIONS

- FIRE NOT SCOUTED AND SIZED UP.
- IN COUNTRY NOT SEEN IN THE DAYLIGHT.
- SAFETY ZONES AND ESCAPE ROUTES NOT IDENTIFIED.
- UNFAMILIAR WITH WEATHER AND LOCAL FACTORS INFLUENCING FIRE BEHAVIOR.
- UNINFORMED ON STRATEGY, TACTICS AND HAZARDS.
- INSTRUCTIONS AND ASSIGNMENTS NOT CLEAR.
- NO COMMUNICATION LINK WITH CREW MEMBERS OR SUPERVISOR.
- CONSTRUCTING FIRELINE WITHOUT A SAFE ANCHOR POINT.
- BUILDING FIRELINE DOWNHILL WITH FIRE BELOW.
- ATTEMPTING A FRONTAL ASSAULT ON A FIRE.
- UNBURNED FUEL BETWEEN YOU AND THE FIRE.
- CANNOT SEE THE MAIN FIRE, AND NOT IN CONTACT WITH ANYONE THAT CAN.
- ON A HILLSIDE WHERE ROLLING MATERIAL CAN IGNITE FUEL BELOW.
- WEATHER IS GETTING HOTTER AND DRIER.
- WIND INCREASES AND/OR CHANGES DIRECTION.
- GETTING FREQUENT SPOT FIRES ACROSS THE LINE.
- TERRAIN AND FUELS MAKE ESCAPE TO SAFETY ZONES DIFFICULT.
- TAKING A NAP NEAR THE FIRELINE.

The wildland fire environment has four basic hazards: lightning, fire-weakened timber (standing and down), rolling rocks, and entrapment by running fires. When these hazards are present, two options exist:

- A. Not to enter the environment
- B. Adhere to safe procedures. The procedures is "LCES".

"LCES" stands for Lookouts, Communications, Escape routes and Safety zones. These are the same items stressed in the Fire Orders and "Watch Out Situations". They should be viewed from a "systems" point of view, all interconnected and interdependent. Each should be evaluated independently, but importantly also evaluated as a system. For example, the best safety zone is of no value if your escape route does not offer timely access when needed.

A key concept, the LCES system is identified to each firefighter prior to when it must be used. The nature of wildfire suppression dictates continuous evaluation of LCES and when necessary, re-establishment of LCES as time and fire growth progress.

Lookouts or scouts (roving lookouts) need to be in position where **both** the hazard and the firefighter can be seen. Lookouts must be trained to observe the wildland fire environment and to recognize and anticipate fire behavior changes. Each situation determines the number of lookouts that are needed: due to terrain, cover and fire size, one lookout is normally not sufficient. When the hazard becomes a danger, the lookout relays the information to the firefighters so they may reposition to the safety zone. Actually, each firefighter has both the authority and responsibility to warn others when hazards become threats to safety.

Communications is the vehicle which delivers the message to the firefighters, alerting of the approaching hazard. As stated in the current training, communication must be prompt and clear, whether by radio or verbal.

Escape routes are the paths the firefighter takes from his/her current threatened position to an area free from danger. Notice that escape routes is the term used, rather than "escape route". Unlike the other components of the system there **must always** be more than one escape route available. A single escape route may be cut off.

Escape routes are probably the most elusive component of LCES. Their effectiveness changes continuously. As the firefighter works along the perimeter, fatigue and spatial separation increases the time required to reach the safety zone. The most common escape route, or part of one, is the fireline. On indirect or parallel fireline, problem situations become compounded. Unless safety zones have been identified ahead as well as to the rear, firefighter retreat may not be possible.

Safety zones are locations where the threatened firefighter may find adequate refuge from the danger. Improperly and unfortunately, shelter deployment sites have been termed "safety zones". Safety zones should be conceptualized and planned as a location where use of a shelter is unnecessary. If there is a deployment, that location is not a true safety zone. Fireline intensity and topographic location determine a safety zone's effectiveness.

To re-emphasize, the LCES system must be identified **prior** to when it must be used! Each time when firefighters are working around hazards, lookouts must be posted with adequate communications to each firefighter, with a minimum of two escape routes from the work location to an adequate safety zone (NOT A SHELTER DEPLOYMENT SITE).

Safety and tactics should not be considered as separate entities! As with any task, safety and technique necessarily should be integrated. The LCES system should be automatic in any tactical operation where a hazard exist or could be present.

LCES is simply a refocusing of the essential elements of the FIRE ORDERS. This systems approach stresses the importance of the components working together.

H. ECOSYSTEM MANAGEMENT

Annually, the City of Boulder Fire, Department, Open Space and Mountain Parks and contracted Fire Protection Districts participate in the implementation of prescribed fire on City property. Prescribed fire exercises also include all spring ditch-burning operations. The goal is to utilize prescribed fire as a training and cooperative exercise. Prescribed fires are deliberately ignited by staff under the direction of the Division Chief of Wildland Fire or designee according to strict guidelines to achieve specific land management objectives. The planning and implementation of prescribed fire on City lands must be accomplished by a NWCG certified Type II Burn Boss. Prescribed fire is implemented as a tall grass and forest management tool on a regular basis. All prescribed fires are treated as a wildfire and all operational and safety guidelines are strictly followed.

Prescribed fire is a cost effective tool that can be utilized in efforts to eradicate noxious weeds, re-establish or improve native vegetation, and mitigate wildfire hazards and unnatural fuel accumulations. Prescribed fires will be carried out only under written and approved prescriptions under the direction of the Division Chief of Wildland Fire or designee in conjunction with the land manager.

PRESCRIBED FIRE GUIDELINES

In order for a prescribed fire program to be successful, a detailed process needs to be identified to inform and educate staff and the community. What follows is a detailed list of staff planning events and public awareness activities which precede the prescribed fire operation.

All components must be addressed before final review by the Fire Chief, Directors of Open Space and Parks and Recreation when applicable, and staff.

Operational Guidelines

- All personnel participating on a prescribed fire must be Red Card qualified. Non-qualified personnel may view from an established staging area in close proximity of the burn. Only after the last hot spots are extinguished or burned out, will non-qualified personnel be allowed to enter the burn area.
- Personnel assigned to all burning operations must be Red Card qualified. **THIS INCLUDES ALL DITCH BURNING AND RESEARCH PLOTS.** All ditch burns must be reviewed, scheduled and implemented by the Division Chief of Wildland Fire or designee.
- On all prescribed fires and ditch burns, personnel must be available for the entire operational period. The operational period is determined by the Division Chief of Wildland Fire or designee and is closely related to weather, fuel loads, available resources and lasts until complete extinguishment of remaining fuels. In some cases, pre-approval of overtime may be necessary to meet desired objectives.
- Personnel assigned to engines or specialized equipment are responsible for returning them to their assigned station. Fire engines must be cleaned, re-stocked, watered and fueled upon returning to their assigned location.
- When a prescribed fire is planned for a specific time frame, personnel work schedules may be adjusted to accomplish resource objectives. The Wildland Fire Mitigation Supervisor or designee will contact personnel and assign to the burn. Because of the nature of prescribed fires, it is sometimes necessary to cancel and reschedule numerous times. This will expedite the process of staffing for burns without needless delays.

Pre-season Planning

- Resource managers, planners and fire staff meet to discuss potential prescribed fire areas, time frames (Spring or fall). This also includes determining land management objectives and establishing priorities.

Site Specific Planning

- A specific site is selected. The resource management staff collects information including; area, size, maps, management objectives, data collection parameters and interagency coordination regarding resource management. A site visit is conducted by resource management and Wildland Fire Division staff of the Fire Department.

Prescribed Fire Burn Plan

- Resource managers and the Wildland Fire Mitigation Supervisor or designee, work together to draft the burn plan. The burn plan contains; land management objectives, acceptable limits of burn perimeter, appropriate holding and suppression operations, availability of resource staff, firing operations, safety zones, briefing information, data collection criteria, etc. A draft document is authored and reviewed for comments. After review from staff, the document is ready for final review and may be approved by the land management directors and Fire Chief. Appropriate department boards are notified and are encouraged to make comments.

Pre-burn Meeting

- The pre-burn meeting is attended by the division supervisors and the Division Chief of Wildland Fire or designee at least 24 hours before the burning operation. A date or burn window is selected for a specific site. Available staffing is confirmed and scheduled. Contacts are made to the adjoining Fire Protection Districts, City of Boulder staff and the Boulder County Health Department. A burn permit is approved and issued by the County health department. A meeting site or staging area is selected and contacts are made to coordinate staff and public information.

Burn Day Activities

- The Division Chief of Wildland Fire or designee contacts the National Weather Service, Boulder County Health Department, Boulder County Sheriff's Department, participating Fire Protection Districts and other supporting agencies.
- All personnel report to the pre-designated staging area. A pre-burn briefing is presented by the resource staff and the Burn Boss addressing safety, access points, firing techniques and sequence, crew assignments, areas closed to vehicle traffic, etc.
- After crews are in place, the Burn Boss contacts the Boulder Regional Communications Center of the burn location. Crews are notified of the ignition sequence and the burn commences.
- At any time the Burn Boss or Safety Officer can halt the burning operation if conditions exceed the prescription or personal safety is at risk. If an escape occurs, the Burn Boss will act as the Incident Commander and direct crews in suppression actions. If the escape is easily controlled, firing operations will proceed when appropriate.

- At all times the prescribed fire operation will be directed by the Burn Boss under the stated land management objectives. If personnel and equipment arrive after the firing operation begins, the staging area manager will contact the Burn Boss and an assignment will be made. In the event of an equipment breakdown or personnel injury, the Safety Officer will coordinate the situation and advise the Burn Boss or designee.

Post Burning Operations

- After all firing operations have ended, crews are assigned to patrol for hotspots and extinguish all embers. All necessary personnel must remain on site to assist in mop-up, resource rehabilitation, support of water shuttles and extinguishment of remaining hotspots. Personnel needing to leave for personal reasons or an emergency must check out with first the Burn Boss or designee and second the staging area manager if established.
- The demobilization of personnel and crews is the responsibility of the Burn Boss or designee and the staging area manager. Personnel may be rotated or replaced as needed. The holding/mop-up crew may remain on the scene for an extended period of time to patrol. In the event of an unexpected weather change, crews will remain on scene as needed.

Patrol

- After the fire is declared out, crews and personnel will be released. Rangers or other designated firefighters will be assigned to patrol with an engine if necessary. Rangers will be expected to include the burn areas in their patrol routes.

Prescribed Fire Critique

- If necessary, a post-prescribed fire critique will be scheduled. The critique will usually take place in the field immediately after the prescribed fire. Only personnel directly involved in the operation will be required to attend. The critique is intended to review practices and procedures involved in the prescribed fire process. This is an opportunity to constructively evaluate operational procedures and to improve on performance in the future. The critique will be scheduled by the division supervisors in conjunction with the Division Chief of Wildland Fire or designee.

FIRELINE PROTECTIVE CLOTHING/EQUIPMENT

The following fireline safety equipment must be worn by **all** fireline personnel when performing prescribed fire, initial attack and extended suppression operations. Failure to adhere to any of the fireline safety standards will result in suspension of fireline duties until corrected.

1. Hardhat with chinstrap - required
2. Long sleeve nomex shirt - required
3. Cotton undershirt - required (preferably long sleeve)
4. Cotton cuffless pants - preferably Nomex
5. Leather boots: 8 inch tall minimum, lug (Vibram) soles - required
6. Eye protection - sunglasses and/or goggles
7. Chainsaw operators
 - a. chaps - required
 - b. eye protection - required
 - c. ear plugs
8. Handkerchief
9. Leather Work gloves - required

Your line pack or fanny pack should contain the following:

1. Small personal first aid kit
2. Food - nutritious snack
3. Sunscreen
4. Insect repellent
5. Prescription drugs - allergy medicine
6. Water
7. Lightweight rain coat
8. Headlamp - batteries
9. Extra pair of socks

It is recommended that all crew members store their fire gear at work. Do not take your fire gear home unless you are on call.

LIST OF WILDLAND FIRE COURSES

S-000 AGENCY SPECIFIC TRN.
S-110 BASIC FIRE ORIENTATION
S-130 BASIC FIREFIGHTER
s-131 ADVANCED FIREFIGHTER (SQUAD BOSS)
S-190 INTRO TO FIRE BEHAVIOR
S-200 INITIAL ATTACK I.C.
S-281 SUPERVISORY CONCEPTS AND TECHNIQUES
S-203 INTRO INFORMATION OFF.
S-215 FIRE OPS./INTERFACE

S-211 WATER/PUMPS
S-212 POWERSAWS
S-213 TRACTORS/DOZERS
S-217 INTERAGENCY HELICOPTER
S-230 CREW BOSS
S-232 DOZER BOSS
S-233 FIRE CREW SUPERVISOR
S-234 IGNITION SPECIALIST
S-235 FELLING BOSS
S-244 FIELD OBSERVER
S-258 COMMUNICATIONS EQUIP/OPS
S-260 FIRE BUSINESS MANAGEMENT
S-270 BASIC AIR OPERATIONS
S-271 HELIBASE MANAGER
S-272 HELISPOT MANAGER
S-290 INTERMEDIATE FIRE BEHAVE
S-300 I.C. MULTI-RESOURCE
S-301 DYNAMIC UNIT LEADERSHIP
S-320 UNIT LEADER
S-330 TASK FORCE/STRIKE TEAM
S-336 SUPPRESSION TACTICS
S-339 DIVISION SUPERVISOR
S-378 AIR ATTACK SUPERVISOR
S-390 FIRE BEHAVIOR CALCULATIONS
S-401 EFFECTIVE MANAGEMENT
S-402 LIAISON OFFICER
S-403 INFORMATION OFFICER
S-404 SAFETY OFFICER
S-420 COMMAND GENERAL STAFF
S-443 INFRARED INTERPRETER
S-445 TRAINING SPECIALIST
S-470 AIR OPERATIONS BRANCH DIRECTOR
S-490 ADVANCED FIRE BEHAVIOR CALCULATIONS
S-520 ADVANCED INCIDENT MANAGEMENT
S-590 FIRE BEHAVIOR ANALYST
S-620 AREA COMMAND

D-110 DISPATCH RECORDER
D-310 SUPPORT DISPATCHER
D-410 SUPERVISORY DISPATCHER
D-480 COORDINATOR

I-100 INTRODUCTION TO ICS
I-200 BASIC ICS
I-300 INTERMEDIATE ICS
I-400 ADVANCED ICS

I-401 ICS FOR EXECUTIVES

PMS-416 STANDARDS FOR SURVIVAL

J-236 STAGING AREA MGR.
J-244 DISPLAY PROCESSOR
J-248 CHECK IN/STATUS
J-252 ORDERING MANAGER
J-253 RECEIVING/DIST. MGR
J-254 BASE CAMP MANAGER
J-255 EQUIPMENT MANAGER
J-256 TOOL EQUIP. MANAGER
J-257 INCIDENT COMMO MANAGER
J-259 SECURITY MANAGER
J-261 TIME RECORDER PERSONNEL
J-262 TIME RECORDER EQUIPMENT
J-263 CLAIMS MANAGER
J-264 COMPENSATION INJURY MANAGER
J-266 COMMISSARY MANAGER
J-272 HELISPOT MANAGER
J-342 DOCUMENTATION UNIT
J-346 SITUATION UNIT LEADER
J-347 DEMOB UNIT LEADER
J-348 RESOURCES UNIT LEADER
J-354 FACILITIES UNIT LEADER
J-355 GROUND SUPPORT UNIT LEADER
J-356 SUPPLY UNIT LEADER
J-357 FOOD UNIT LEADER
J-358 COMMO UNIT LEADER
J-359 MEDICAL UNIT LEADER
J-362 COST UNIT LEADER
J-363 COMPENSATION CLAIMS UNIT
J-365 TIME UNIT LEADER
J-368 PROCUREMENT UNIT LEADER
J-374 HELICOPTER COORDINATOR
J-375 AIR SUPPORT GROUP SUPERVISOR
J-376 AIR TANKER COORDINATOR
J-400 INCIDENT COMMANDER
J-430 OPERATIONS SECTION CHIEF
J-440 PLANNING SECTION CHIEF
J-450 LOGISTICS SECTION CHIEF
J-460 FINANCE CHIEF

FIRE SUPPRESSION POSITIONS AND QUALIFIED PERSONNEL

INCIDENT COMMANDER TYPE III (ICT3)

JUSTIN DOMBROWSKI
GREG TOLL

INCIDENT COMMANDER TYPE IV (ICT4)

DAVE GELDERLOOS
KIP KORTHUIS
BRIAN OLIVER
DREW PETERSEN (T)
DAVE RICHTER
PETE TAYLOR
MAX TWOMBLY

INCIDENT COMMANDER TYPE IV (ICT5)

DREW PETERSEN

SAFETY OFFICER TYPE II (SOF2)

GREG TOLL

SAFETY OFFICER TYPE III (SOF3)

JUSTIN DOMBROWSKI
BRIAN OLIVER (T)

INFORMATION OFFICER TYPE I (IOF1)

JUSTIN DOMBROWSKI – Apprentice

INFORMATION OFFICER TYPE II (IOF2)

JUSTIN DOMBROWSKI (T)

CITY INFORMATION OFFICER

JENNIFER BRAY
DAVE SUTHERLAND
JANA PETERSON

LIAISON OFFICER (LOFR)

JUSTIN DOMBROWSKI

OPERATIONS SECTION CHIEF TYPE 2 (T)

GREG TOLL

DIVISION GROUP SUPERVISOR (DIVS)

JUSTIN DOMBROWSKI
GREG TOLL
MAX TWOMBLY (T)

STRUCTURE PROTECTION SPECIALIST (STPS)

JUSTIN DOMBROWSKI

TASK FORCE LEADER (TFLD)

JUSTIN DOMBROWSKI

BRIAN OLIVER (T)

GREG TOLL

MAX TWOMBLY

STRIKE TEAM LEADER (STCR, STEN)

JUSTIN DOMBROWSKI - Engines

DAVE GELDERLOOS - Crews, Engines

KIP KORTHUIS – Engines

BRIAN OLIVER (T) - Crews, Engines

DAVE RICHTER - Engines

GREG TOLL – Crew, Engines

MAX TWOMBLY - Crews, Engines

DAVE WILKE - Engines

SINGLE RESOURCE - CREW BOSS (CRWB)

BRIAN OLIVER

DREW PETERSEN

DAVE RICHTER

MAX TWOMBLY

RICH PALESTRO

SINGLE RESOURCE - ENGINE BOSS (ENGB)

BRIAN OLIVER RICH PALESTRO

DREW PETERSEN

MAX TWOMBLY

SINGLE RESOURCES - BURN BOSS (FIRB)

BRIAN OLIVER (T)

DREW PETERSEN (T)

GREG TOLL

SINGLE RESOURCES – FELLING BOSS (FELB)

BRIAN OLIVER (T)

CITY ENGINE BOSS

RICK HARFIELD

BRAD SKOWRONSKI

PETE TAYLOR

SQUAD BOSS (FFT1)

BRAD SKOWRONSKI

BURTON STONER

SAWYER (FALB, FALA)

DAVE GELDERLOOS (B)

DAN HIESICK (B)

KIP KORTHUIS (B)

BRIAN OLIVER (B)

DREW PETERSEN (B)

DAVE RICHTER (B)

BRAD SKOWRONSKI (B)

PETE TAYLOR (B)

MAX TWOMBLY (B)

FIREFIGHTER (FFT2)

RICK HATFIELD

JEFF HOLLAND

MATT JONES

DAVE KUNTZ

COLIN MORRISON

ANDY PELSTER

BRENT WHEELER

HELIBASE MANAGER 2 (HEB2)

GREG TOLL

HELICOPTER MANAGER (HCWN)

BRIAN OLIVER

RICH PALESTRO (T)

GREG TOLL

HELICOPTER CREWMEMBER (HECM)

JUSTIN DOMBROWSKI

DAN HEISICK

GREG TOLL

BRIAN OLIVER

DREW PETERSEN

AIRCRAFT BASE RADIO OPERATOR (ABRO)

DAN HEISICK (T)

FIELD OBSERVER (FOBS)

JUSTIN DOMBROWSKI

DREW PETERSEN

FIRE EFFECTS MONITOR (FEMO)

DAN HEISICK (T)

JUSTIN DOMBROWSKI
DREW PETERSEN

MEDICAL UNIT LEADER (MEDL)
DREW PETERSEN

EMT (STATE OF COLORADO)
STEVE ARMSTEAD
JUSTIN DOMBROWSKI
DAVE GELDERLOOS
DAN HEISICK
KIP KORTHUIS (EMTP)
JEAN KOSZALKA
BRIAN OLIVER
DREW PETERSEN
MIKE RANGEL
MAX TWOMBLY

BASE / CAMP MANAGER (BCMG)
LARRY MASON (T)

SECURITY MANAGER (SECM)
LARRY MASON (T)

PRESCRIBED FIRE BURN BOSS I (RXB1)
JUSTIN DOMBROWSKI
GREG TOLL

IGNITION SPECIALIST I (RXI1)
JUSTIN DOMBROWSKI
MARC MULLENIX
GREG TOLL

IGNITION SPECIALIST II (RXI2)
JUSTIN DOMBROWSKI
BRIAN OLIVER
DREW PETERSEN (T)

RESOURCE ADVISORS
STEVE ARMSTEAD
ANN ARMSTRONG
DON DAMICO
LAURIE DEITER
ANDY PELSTER
LYNN RIEDEL

SUPPORT

ROY BELL

LAURIE DEITER

MIKE PATTON

BRYAN PRITCHETT

PAUL ROVNAK

MARY LOU SMITH

TRAINING SPECIALIST (TNSP)

JUSTIN DOMBROWSKI

I. SIZE UP

Size-up occurs prior to any incident and is a continuous process from initial attack to demobilization. Organizing equipment and personnel, collecting information on weather, fuels and topography are all part of the size-up process. Sizing up a wildland fire is vital to a safe and successful suppression operation.

The following check-list includes items which should be identified when arriving first on scene. The list will aid you in supplying information to dispatch and assist you in determining resources needed for suppression operations.

Upon arrival the I.C. will:

1. Note arrival time.
2. Make quick size-up.
3. Formulate a simple plan of attack and make sure all resources are informed.
4. Select access and escape routes and make them known.
5. Locate yourself in an accessible location in view of the fire.
6. Post lookouts, if possible.
7. Manage the incident.
8. Keep communications updated on land status, resources committed, containment and control times, and demobilization.

SIZE-UP CHECKLIST

FUELS

FUELS BURNING

FUELS AHEAD OF FIRE

CONTINUITY

ARRANGEMENT

DEAD OR LIVE

SIZE

WEATHER

WIND SPEED
DIRECTION
RELATIVE HUMIDITY
TEMPERATURE
FORECASTED WEATHER - FRONTAL PASSAGE, THUNDER STORMS
LOCAL INFLUENCES - VALLEY, CANYON, RIDGE, ETC.
FIRELINE WEATHER MONITORING - BELT WEATHER KIT
* REQUEST WEATHER FORECAST FROM COMMUNICATIONS

TOPOGRAPHY

ELEVATION
GEOGRAPHICAL LOCATION - TOWNSHIP/RANGE
GEOGRAPHICAL DESCRIPTION - VALLEY BOTTOM, MID-SLOPE, RIDGE, ETC.
SLOPE
ASPECT
BARRIERS - ROCK SLIDES, ROADS, WATER, ETC.
ACCESS

FIRE BEHAVIOR

GENERAL DESCRIPTION - SMOLDERING, CREEPING, RUNNING, TORCHING, CROWNING, ETC.
RATE OF SPREAD
FLAME LENGTH
SPOTTING
PREDICTED FIRE BEHAVIOR FOR BURNING PERIOD

GENERAL INFORMATION

ARRIVAL TIME

ROUTE TO INCIDENT

LAND STATUS - OWNERSHIP
RESOURCES ON SCENE
RESOURCES NEEDED
PROBABLE CAUSE
EXPOSURES THREATENED
PUBLIC SAFETY - TRAFFIC CONTROL, EVACUATION, ETC.
COMMAND POSTS - STAGING AREAS
SUPPRESSION ORGANIZATION
SAFETY ZONES/ ESCAPE ROUTES

FUELS

The Colorado Front Range is a high fire conducive environment. Grasses, shrubs, brush and timber cover a majority of our backdrop. The grasses are the fuels that carry wildfire to other vegetation. Grass fires seem innocent, but they can move rapidly consuming large amounts of

acreage in a very short time. Timber fires receive the respect they deserve, but grass fires are responsible for more wildfire firefighter deaths than any other fuel type.

1. Determine fuels ahead of the fire and what direction it is moving.
2. Are the fuels continuous in the direction of the rate of spread?
3. Are there natural or man-made barriers ahead of the fire?
4. Are there extensive ladder fuels which will cause the fire to become airborne and spot ahead of the main fire.
5. What are the fuels characteristics, dry, dead, arrangements etc.?
6. What fuels are ahead of the fire?

WEATHER

More than any other factor short and long term weather phenomena are the driving forces behind all wildland fires. Weather will determine rate of spread, direction, burning conditions, fuel moisture, etc.

1. What is the state of the weather?
2. What is the wind doing?
3. What is the forecast?
4. What time of the day is it?
5. Are there cumulus clouds in the area?
6. What local factors influence weather?

Thunderheads or tall cumulus clouds are an indication of unstable air and erratic winds which could increase or dramatically change the immediate fire environment. Diurnal wind changes can be altered by thunderstorm activity. Post lookouts and acquire weather forecasts from communications.

TOPOGRAPHY

Steep slopes, canyons, chimneys, saddles, mid-slope roads or slight depressions in the terrain can alter and increase the rate of spread of wildfires. Many firefighters have been seriously injured or killed during suppression operations in mountain topography. Remember, in a wind driven fire the flames are bent towards the fuels, increasing the radiant heat and drying the fuels ahead of the fire. When fire is on a slope, the fuels are brought closer to the fire increasing radiant and convective heating while preheating the fuels ahead of the fire.

On the Front Range, the eastern slopes are the first to absorb the sun's rays. Eastern aspects usually consist of a variety of sparse to dense pockets of vegetation and at times can contain very low fuel moisture due to the rain shadow effect. Northern aspects usually consist of continuous heavy fuels (timber), which contain high fuel moisture. Western aspects receive the afternoon warmth of the sun and contain a moderate density of vegetation. These fuels are dried and pre-heated making them more available to burn during afternoon lightning activity. Southern slopes receive the most sunlight and contain light flashy fuels (grasses and brush). Wildfires on southern slopes that are wind driven can consume vast acres in a very short period.

Things to remember during suppression operations in mountain topography:

1. Wind increases as canyons narrow.
2. Wind travels uphill during the day and downhill at night.
3. At tops of ridges and or saddles, winds eddy in all directions.
4. Inversions increase mid-slope fire activity.
5. Spotting potential is increased in mountainous terrain.
6. Fires burning at the base of slopes pre-dry and pre-heat fuels above.
7. Escape routes and safety zones need to be identified constantly.

On the Colorado Front Range, chinook winds can dramatically alter the fire environment. During these powerful winds wildfires can burn downhill during daylight hours. Chinook winds can rob the vegetation of fuel moisture increasing the availability of the fuels to burn.

*Drought, heavy fuel loading, disease, consecutive days of extreme high temperatures, long periods of low precipitation, low soil and fuel moisture, low humidities all contribute to alter the fire environment. All must be considered when tactical decisions are made.

J. STRATEGY AND TACTICS

All strategy and tactics will be based on safety first. The basic strategy for the suppression of wildland fires is perimeter control. To attain perimeter control you must build fireline encompassing the entire fire, utilizing natural barriers, equipment and firefighter's in an effective and efficient manner. A safe fireline is a barrier which fire will not cross.

Class "A" Foam is a fire suppressant rather than a fire retardant. It physically suppresses a fire, whereas a fire retardant chemically retards the fire. Wildland fire fighting foam improves water's ability to suppress fire. Foam is an aerated solution of water and foam concentrate - a relatively stable aggregation of small bubbles less dense than water. The foam concentrate consists of a surfactant, a foaming agent, a stabilizer, a solvent and corrosion inhibitors. By adding foam concentrate to water a foam solution is produced, by adding energy to the foam solution, foam is made. Air is forced into the foam solution, forming small bubbles. The foam concentrate reduces the surface tension of the water, allowing bubbles to form more readily.

A solid stream of water by itself is only 5 to 10% efficient at fire extinguishment. Much of the water directed at the fuel just bounces off and runs away. Also, the polarity of the water molecule results in high surface tension, such that water forms into beads or drops, rather than films. This means that more water must be used to counteract its tendency to form a cohesive mass. Water, however, is an efficient absorber of heat.

Foam increases the effectiveness of water and reduces runoff and evaporation, thus making the supply last longer. This is important where water is scarce and it is time-consuming and costly to refill ground-based equipment or aircraft. Water is not necessarily free, as obtaining it

involves costs. A small expenditure can potentially turn a supply of plain water into a foam solution with 10 times the ability of the original supply of untreated water.

Tests have shown that one of the many values of foam is its efficiency as an insulator and reflector against radiant heat. Foam may be laid on fuels ahead of a wildfire, or on the boundary of a prescribed fire to act as a barrier to protect adjacent exposures. The application of foam to vegetation results in an increase in fuel moisture in the forest stand. Foam covers and surrounds fuels and allows the water to penetrate the fuel (20 times faster than plain water) instead of running off.

Foam works on grass, brush, timber, and slash fuel types. It is also effective on vehicle fires and in structure protection. Foam may prove to have the greatest impact in the wildland/urban interface fire situations. (Ebard and Reeves 1982)

DIRECT ATTACK/OFFENSIVE

This method also known as hotline, usually begins at the point of origin and proceeds up each flank with combinations of hose line, hand crews, dozers and supported by aircraft.

Cutting handline, throwing dirt, cooling the fires edge, or hotspotting can be dangerous. Lookouts, good communications, escape routes and safety zones are a must when working in a hot smoky environment.

*** FLAME LENGTHS EXCEEDING 4 FEET ARE TOO DANGEROUS FOR HANDCREWS.**

INDIRECT ATTACK/DEFENSIVE

(WIND DRIVEN FIRES) Engines are assigned to protect structures with crews performing triage and assisting in evacuation. Patrols are utilized to scout ahead of the flaming front. Crews, dozers and aircraft are assigned perimeter control to prevent the fire from turning around if a general or diurnal wind change occurs.

Wind driven fires in flashy fuels combined with mountain topography have been responsible for many firefighter fatalities in the past. Indirect attack should be utilized when the heat is too extreme or access is a problem for manpower and equipment.

INITIAL ATTACK

During initial attack it is important to assign resources where they will be most effective. Maintaining control and tracking resources is a priority, (ICS-201). Organization is the key to success in suppression operations. Remember, the scenario will change throughout the incident, always have more than one plan and plan for the worst.

As an Initial Attack Incident Commander, you must first stop the spread and/or stop the damage, mop-up, ensure extinguishment and assign patrols for a possible rekindle.

STRUCTURE DEFENSE

More frequently fire crews are being dispatched to wildfires only to discover that structures are threatened or involved. Better known as the urban interface, these fires require experienced firefighters, large quantities of water and sometimes air support.

Many times the first line or initial attack resources to arrive will be Parks and Recreation or Open Space employees.

STRUCTURE DEFENSE GUIDELINES

- A. Prevent the fire from reaching structures.
- B. Keep the fire from leaving structures and involving the wildlands.
- C. Assist in rescue or evacuation procedures.
- D. Park the engine in a safe location away from transmission lines.
- E. Back the engine into the driveway, facing out for quick egress.
- F. Don't waste your time on a loser, find a house that's defensible.
- G. Don't waste water in windy conditions.
- H. If there is time, clear all flammable materials off of porches, decks, etc. (If homeowner refuses to leave, have them assist in triage.)
- I. Turn on sprinkler systems, hoses etc.
- J. Always leave a reserve supply of water in your tank for emergency situations.
- K. Stay mobile.
- L. Adhere to all the **FIRE ORDERS** and **"WATCH OUT" SITUATIONS**.

NEVER ENTER A BURNING BUILDING. CALL FOR ASSISTANCE FROM THE LOCAL FIRE DEPARTMENT.

K. INTERAGENCY COOPERATION/INITIAL ATTACK

The City of Boulder Mountain Parks and Open Space Departments contract with the following fire departments for initial attack response to wildfires on their properties: Coal Creek, Eldorado Springs, Cherryvale, 4-Mile, Boulder Rural, Hygiene, Boulder Mountain Fire Authority, Lefthand and Mountain View. Indian Peaks Fire Department responds to the watershed in the Indian Peaks Wilderness. The Sargarload Fire Department responds to the Betasso water treatment plant.

Wildfires that cross City of Boulder properties and threaten private land can become a tactical problem. The contracted fire protection districts will be expected to aggressively initiate the attack on the wildland fire. If the wildland fire progresses into the residential area, they can be expected to redirect their resources for structure protection. The City of Boulder's resources and equipment will consider the wildland fire the first priority. The city fire crew will initially attack the wildfire and attempt to stop the rate of spread utilizing the appropriate suppression action.

At times, the fire department and wildland crew will be called upon to assist neighboring districts. The first priority for city resources is to protect threatened city property. The Fire

Chief or his designee may elect to contribute resources to an out of city incident without compromising city protection.

L. COMMUNICATIONS

The wildland fire team will utilize Red 3 through Red 6 during operations on a wildfire. Red 3 ensures proper communications among all fire crew personnel. Red 3 is also utilized by other emergency service agencies during operational periods. Please limit radio traffic to a minimum during suppression operations. During a large incident multiple channels will be utilized. Below is the suggested multi-agency wildland fire group.

M. CITY RESOURCES

CITY OF BOULDER WILDLAND FIRE ENGINES/EQUIPMENT
FIRE DEPARTMENT/OPEN SPACE/ MOUNTAIN PARKS

OPEN SPACE/MOUNTAIN PARKS

Type	Number	Gallons	Location	Capability
6x	2533	300	Annex	4x4#
6X	2534	300	Cherryvale	4x4#
6X	2536	300	Nature Center	4x4#
6x	2537	300	Flagstaff	4x4#

FIRE DEPARTMENT

Type	Number	Gallons	Location	Capability
6X	Eng.2531	300	Station 1	4x4#
6X	Eng.2532	300	Station 2	4x4#
3X	Tender 2541	1000	Fire Barn	6x6#
3x	Tender 2542	1000	Fire Barn	6x6#
Crew Carrier	2551		Fire Cache	4x4#
Terra Torch	50		Fire Barn	

N. BOULDER COUNTY MODE SYSTEM

MULTI-AGENCY RESPONSE SYSTEM
DEFINITION OF FOREST FIRE MODES

- **Mode 1** - Routine wildfire operation carried out by single department without mobilization of additional resources.
- **Mode 2** - Larger wildfire operation which remains under fire department command but requires mutual aid assistance, limited mobilization of county and state resources and limited alerting of back-up forces.
- **Mode 3** - Large or threatening wildfire which is assumed by Sheriff and/or others depending on land jurisdictions. Requires full mobilization of county and/or district level resources.
- **Mode 4** - Severe fire which exceeds county resources. Implementation of S.E.F.F. or other disaster assistance/ victim services and other M.A.C.S. elements.

Five levels of government are involved in the prevention and suppression of forest fires in Boulder County federal, state, city, county and fire districts. Responsibilities are delegated by statute to each level, but these are modified by agreements and contracts amount the agencies, informal understandings, and the relative capability of the agencies to respond to and effectively suppress fires.

The federal government has the responsibility for fire protection on lands which are under its jurisdiction through the United States Forest Service, the Bureau of Land Management and the National Park Service.

The state government has responsibilities to assist in the protection of forests and watersheds on public and private nonfederal land, and these are administered through the Colorado State Forest Service.

The county government is given certain responsibilities by statute which are delegated to the Sheriff, who is to act as "Fire Warden" in instances of forest and prairie fires, and to the County Commissioners, who control the county's financial aspects of fire suppression.

In Boulder County, first attack responsibility rests with the fire departments and fire protection districts. By virtue of their ability to make timely initial attack and to control the vast majority of forest fires which occur, and their obligation to protect threatened improvements, the fire departments are dispatched and respond to forest fires without regard to land jurisdiction. For forest fires on any lands, the responsibility of the fire department is to respond to, attack, and control the fire if possible; and to call for additional assistance if necessary.

Command and financial responsibility for fires exceeding a fire department's resources and capabilities will be passed to the county or federal agency, as appropriate.

R. COOPERATIVE AGREEMENTS

- FOREST FIRE PROTECTION AGREEMENT BETWEEN COLORADO STATE FOREST SERVICE AND THE U.S.D.A. FOREST SERVICE, REGION 2, JUNE 29, 1977

This is a general agreement on firefighting policy in the State of Colorado. Each agency agrees to provide first attack support for the other on a reimbursement basis, and the parties agree to share fire suppression costs on multi-agency fires on a proportionate basis of the land involved.

- FOREST FIRE CONTROL AGREEMENT, BY AND BETWEEN BOULDER COUNTY, COLORADO STATE FOREST SERVICE, ARAPAHOE-ROOSEVELT NATIONAL FOREST, CANON CITY DISTRICT, BUREAU OF LAND MANAGEMENT, AND ROCKY MOUNTAIN NATIONAL PARK 1981

This agreement defines the basic working relationship among these five agencies in Boulder County. In this agreement, the fire departments are represented by the County. First and direct responsibility for fire suppression rests with the agency having land jurisdiction. Agencies taking independent fire suppression action are to notify the agency having jurisdiction as soon as feasible, and suppression action by these agencies will be reimbursed. Costs of multi-agency fires will be shared on a proportionate basis. There should be no delay in making initial attack by the fire departments pending determination of land ownership.

- BOULDER COUNTY ANNUAL OPERATING PLAN

An annual update to the Forest Fire Control Agreement. Adds basis for reimbursement for fires on federal land, rates for rental equipment and manpower, and sets forth the MACS structure to be used on interagency fires.

- EMERGENCY FUND CONTRACT AGREEMENT FOR FOREST FIRE CONTROL, SEPTEMBER 1966

Establish the conditions for implementation of the State Emergency Fund. Under this contract, Boulder and other counties pay an annual fee to create an emergency fund. When county resources are exceeded on a fire, the State and Sheriff may agree to transfer firefighting responsibility to the Colorado State Forest Service to be paid from the fund.

- SERVICE AGREEMENTS BETWEEN THE CITY OF BOULDER AND FIRE DEPARTMENTS WHICH PROTECT CITY LANDS

Outlines the nine fire departments and USFS which have initial attack responsibility in conjunction with the City of Boulder on lands, Watershed, Open Space and Mountain Parks, owned by the city.

- City of Boulder, Response Guidelines to Mountain Parks

On January 1, 2000, the City of Boulder Fire Department assumed the fire suppression and emergency medical (EMS) responsibilities on Mountain Parks land that Cherryvale Fire Protection District previously serviced under contract. The purpose of this operating plan is to clarify standard operating procedures, policies and responsibilities for the implementation of cooperative wildland fire suppression and other emergency services (including motor vehicle accidents) on the City of Boulder Mountain Parks lands.

A. Incident Management

Under CRS 30-10-513 "Sheriff in charge of forest or prairie fire", response to incidents will follow the Boulder County Incident Response Guidelines and utilize the Incident Command System. Any agency may initiate the Incident Command System upon arriving at the incident, regardless of the responsibility assigned by the Incident Response Guidelines. The incident command may be transferred to the appropriate agency upon their arrival or a unified command may be established with the other primary agencies or jurisdictions. Large, multi-jurisdictional wildland fires will also utilize the Multi-Agency Coordination System (MACS).

B. Geographic Area

The geographic area of responsibility is: all Mountain Parks land, including Flagstaff Road, west of Broadway, south of Boulder Canyon, north of Bear Canyon. Maps with all pertinent access information will be distributed to The City of Boulder Fire Department.

C. Communications

All fire and EMS incidents will initially utilize Red 1 for toning agencies, status, size-up and ordering resources through Communications. Red 3 will be the preferred frequency for incident coordination in the field. The communications plan should reflect what is realistic for that incident and personnel on scene should reasonably anticipate specific frequencies they may need to utilize for a given incident. It will be expected that any personnel involved in the incident will be able to comply with the communications plan. Consult the Boulder County Frequency List for appropriate frequencies.

D. Two Hour Threshold

It is imperative that the Battalion Chief is advised and/or determines when the commitment of the City of Boulder Fire Departments resources will reach or exceed the two hour threshold. At that threshold, the Battalion Chief must back-fill with overtime personnel to cover Station 2.

E. Search and Rescue (SAR)

Under CRS 24-32-2107 (10) "The Sheriff of each county shall: (a) be the official responsible for coordination of all search and rescue operations within the Sheriff's jurisdiction". The City of Boulder Fire Department will be toned for all search and rescue (SAR) calls. If it is determined that the incident is non-injury (stranded climber/overdue hiker) and their resources are not required, they will be canceled. It is standard operating procedure on SAR incidents to establish the Operations Section Chief, a Rocky Mountain Rescue Group member, as early as possible. During a "rescue" the operations position will typically be at the actual rescue site, coordinating all personnel in the field and monitoring the execution of the incident action plan. During a "search" the operations position will be located at the Incident Command Post or the Incident Base.

F. Ongoing Agency Coordination

An operations group with representatives from the Boulder County Sheriff's Department, the City of Boulder Fire Department, City of Boulder Mountain Parks and the City of Boulder Open Space has been established to develop and maintain the objectives of this plan. This group will continue to meet and coordinate throughout the year to address current and future operating issues.

G. Training

The City of Boulder Fire Department and the City of Boulder Mountain Parks will coordinate training concerning access, trail systems, fire roads, natural resources, communications and any other applicable issues. The Sheriff's Department will provide and coordinate training regarding operations with Rocky Mountain Rescue (RMR) and other applicable county agencies.

- Protocol For Agency Call Out/Tones

- WILDLAND FIRE

- i. MP/OS Rangers
- ii. City of Boulder Fire Station #2
- iii. City of Boulder Wildland Fire Group 2590
- iv. Boulder County Sheriff
- v. Colorado State Forest Service
- vi. United States Forest Service
- vii. Other Mutual Aid Resources

- SEARCH AND RESCUE

- i. MP/OS Rangers

- ii. City of Boulder Fire Station #2
- iii. Boulder County Sheriff
- iv. Rocky Mountain Rescue
- v. Front Range Rescue Dogs
- vi. Pridemark Ambulance
- vii. Other Mutual Aid Resources

- EMS/MOTOR VEHICLE FLAGSTAFF ROAD

- i. MP/OS Rangers
- ii. City of Boulder Fire Station #2
- iii. Boulder County Sheriff
- iv. Pridemark Ambulance
- v. State Patrol (State Patrol is DERA for incidents on roadway)
- vi. Other Mutual Aid Resources

- HAZARDOUS MATERIALS

- i. City of Boulder Fire Station #2
- ii. Boulder County Sheriff
- iii. MP/OS Rangers
- iv. State Patrol (State Patrol is DERA for incidents on roadway)
- v. Other Mutual Aid Resources

- STRUCTURE FIRES

- i. City of Boulder Fire Station#2
- ii. Cherryvale Fire Protection District
- iii. Boulder County Sheriff
- iv. MP/OS Rangers
- v. City of Boulder Wildland Fire Group 2590
- vi. Other Mutual Aid Resources

BOULDER COUNTY FIRE MOBILIZATION PLAN

Describes the organizational structure and procedures to be applied to wildfire situations in Boulder County. A working set of procedures from initial attack until the capability of the county is exceeded and/or the fire is assumed by other.

- Mode 1
- Fire Department, Parks and Recreation, Open Space
- The initial response fire department is in charge of all fire operations.
- Upon arrival at the scene, Boulder Communications is advised of the situation and of major status changes during operation.
- The fire department, Parks and Recreation, or Open Space command officer establishes incident command and a command post.
- The incident commander will attempt to protect the origin of the fire.
- Boulder Communications
- Receive fire reports and dispatch first response agencies.
- Boulder Sheriff's operations staff and emergency services informational page

- Notify Colorado State Forest Service and U.S. Forest Service by tone alert of all forest fires and smoke reports
- Dispatch additional resources as requested by command
- Boulder Sheriff's Department
- Assist incident commander as needed
- Provide traffic and crowd control, scene security or evacuation as needed
- Determine jurisdiction and/or ownership
- Provide investigative assistance to command, if a crime has been committed, take over and complete the investigation with any assistance requested of the fire department.

- Mode 2

- Fire Department , Parks and Recreation, Open Space
- Incident commander requests 1 mutual aid assistance:
- Department or agency wanted
- Type of equipment needed. (Pumper, tanker, etc.)
- Personnel requirements
- Location of staging area, and person to contact
- Requested agency responds;
- Request can/cannot be filled
- Estimated time of arrival
- Mobile radio(s) with Red 1, 3
- Appropriate gear for all responding personnel
- Leadership appropriate for request
- Appropriate hand tools for responding Personnel
- Incident commander confers with Sheriff's Department for need for additional resources not routinely available.
- Slurry
- Helicopter and crews
- County, State or Federal resources
- Boulder Communications
- Dispatch mutual aid departments and agencies as requested by command
- Boulder Sheriff's staff and emergency services pages
- Initiate major events log
- Process resource requests
- Assign and coordinate frequency usage
- Boulder Sheriff's Department
- Determine need for additional Sheriff's resources
- Mutual Aid Coordinator (standby or respond to sit-room)
- Emergency Services personnel respond to scene
- Confer with incident commander
- Possible mode 3 operations
- Need for unusual resources
- County, State, Federal
- Provide investigative assistance as required/requested
- Assess need/implement road closures
- Direct equipment and personnel to staging area

- Mode 3

- Boulder Sheriff's Department
- Assume Incident Command responsibilities
- Appoints an Incident Commander(s)
- Order additional resources as necessary
- Insure adequate staffing of I.C. positions
- Request Patrol supervisor
- Coordinate assignment of patrol and reserves
- Provide adequate relief for division personnel
- Determine need for Mode 4 operation
- Request MACS be initiated
- Provide logistical support for incident
- Assume financial responsibility for incident, beginning in Mode 3
- Boulder Communications
- Begin MACS operations
- Shift resource requests to MACS
- Fire Departments, Parks and Recreation, Open Space
- Provide staffing and equipment requested by command
- Provide relief crews for shift changes
- Colorado State Forest Service
- On-call fire operations personnel respond
- Determine need for notification of CSFS Offices
- Determine need for additional CSFS personnel
- Provide assistance in the fire organization and expertise on fire behavior control
- Determine need for additional CSFS resources
- State fire cache
- State Overhead Team
- Assume positions in organization as requested by I.C.
- United States Forest Service
- On-call fire operations personnel respond
- Determine need for notification of USFS Offices
- Determine need for additional USFS personnel
- Confer with I.C. on possible Mode 4 operations
- Request additional resources
- Request Overhead Team
- Request additional crews
- Determine time of transfer of command
- Send representative to MACS

- Mode 4

- Command and financial responsibility of a Mode 4 fire shifts to a state or federal agency. Personnel from local fire departments, or the county fire crews may be hired to fill organizational slots or become part of the line suppression organization as needed.

S. REPORTING/DOCUMENTATION

After each incident a wildfire report must be filled out. An incident is defined as a illegal campfire, smoke report, prescribed burn, or wildfire. Reporting is not limited to City of Boulder incidents. All mutual aid wildfire responses must be included.

Most incidents are relatively small and only require a response from a single ranger. Smoke reports and illegal campfires usually fall into this category. Take a few minutes and fill out the report.

All large fires and prescribed burns will be documented by the Wildland Fire Coordinator. Information might be needed by the first responding ranger. This information can be documented on the ICS-201.

The ICS-201 should be utilized by all first responding individuals. The form is two sided and is essential for collecting information on any incident. The ICS-201, Incident Briefing has information vital for your wildfire report.

T. PERSONNEL AUTHORIZED FOR EXTRAORDINARY COSTS

The following City of Boulder personnel may authorize extraordinary expense. Such as retardant drops, helicopters, food for fireline personnel, etc. when wildfires threaten or impact City of Boulder Open Space, Mountain Parks or Watershed properties .

NAME

BOULDER FIRE DEPARTMENT

LARRY DONNER

GREG TOLL

JUSTIN DOMBROWSKI

BATTALION CHIEFS:

ADRIAN HISE

GILBERT ESPINOZA

DAN THOMAS

OPEN SPACE/MOUNTAIN PARKS

STEVE ARMSTEAD

BRIAN PRITCHETT
DEAN PASCHAL
MIKE PATTON

WATERSHED
CRAIG SKEIE - SILVER LAKE/C.U. DISPATCH

U. RESOURCE ADVISORS

In the event of a wildfire on City of Boulder property a qualified resource advisor will be supplied by the city. The resource advisors can assist the overhead team in lookout responsibilities, locating access routes, water sources, identifying hazards and sensitive areas, monitoring suppression and rehabilitation operations.

The resource advisors goal is to ensure appropriate suppression actions are implemented to limit resource damage. The Wildland Fire Coordinator or acting will request the advisor from the existing Mountain Parks and Open Space staff.